

Deschutes Sub-Group 2/26/2015			Initial Budget		Sub-group Recommended Budget		Post-Budget Meeting	
			1/30/2015		2/23/2015		2/26/2015	
			Budget Estimate - Reclamation and IDIQ Contractor	Budget Estimate - Non-Federal Cost Share Partner	Budget Estimate - Reclamation and IDIQ Contractor	Budget Estimate - Non-Federal Cost Share Partner	Budget Estimate - Reclamation and IDIQ Contractor	Budget Estimate - Non-Federal Cost Share Partner
Task	Description	Task						
1.1	Summarize existing information on current water supply	1.1	\$1,000	\$7,500	\$1,000	\$7,500	\$1,000	\$5,000
1.2	Develop climate change analysis projections.	1.2	\$60,000	\$1,800	\$60,000	\$2,300	\$60,000	\$1,800
1.3	Apply climate change analysis to current supplies.	1.3	\$65,000	\$1,800	\$65,000	\$2,300	\$65,000	\$1,800
1.4	Write Completion Memorandum #1.	1.4	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
2.1	Summarize existing information on current and future water demand.	2.1	\$1,000	\$7,500	\$1,000	\$7,500	\$1,000	\$5,000
2.2	Evaluate current and future groundwater/mitigation demand.	2.2	\$2,000	\$5,000	\$2,000	\$5,000	\$2,000	\$5,000
2.3	Evaluate ecological benefits of meeting baseline stream flow targets (State of Oregon In-stream Water Rights) in the Upper Deschutes. Evaluate additional ecological benefits in Upper Deschutes, Crescent Creek , and Little Deschutes at a range of flow conditions.	2.3	\$2,000	\$150,000	\$2,000	\$108,000	\$5,000	\$80,000
2.4	Evaluate stream water quality (budget assumes RiverWare evaluation of temperature issues).	2.4	\$50,000	\$1,800	\$50,000	\$1,296	\$40,000	\$1,200
2.5	Apply climate change analysis to projected future demands.	2.5	\$60,000	\$1,800	\$60,000	\$1,800	\$60,000	\$1,800
2.6	Write Completion Memorandum #2	2.6	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
3.1	Identify and evaluate current water and power infrastructure in the basin, and develop metrics of measuring baseline system reliability.	3.1	\$5,000	\$20,000	\$5,000	\$20,000	\$5,000	\$10,000
3.2	In-depth analysis of COID infrastructure/Master Plan and Master Plan framework for other districts (directly linked to addressing water supply imbalances in Tasks 4.3, 4.4, and 5.1).	3.2	\$5,000	\$100,000	\$5,000	\$72,000	\$5,000	\$72,000
3.3	Characterize projected water and power infrastructure performance based on climate change projections	3.3	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$5,000
3.4	Write Completion Memorandum #3	3.4	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
4.1	Crane Prairie, Wickiup and Crescent reservoir optimization options: a) modelling, b) operations, c) governance, legal and administrative constraints.	4.1	\$25,000	\$25,000	\$25,000	\$18,000	\$25,000	\$18,000
4.2	Summarize existing information on water supply opportunities (i.e. Deschutes Water Planning Initiative findings)	4.2	\$1,500	\$5,000	\$1,500	\$3,600	\$1,500	\$3,600
4.3	Evaluate water conservation and re-allocation options and packages of options/projects. Identify viable options for meeting the water supply needs for irrigation, instream and municipal/water suppliers. Identify legal and administrative requirements for option implementation.	4.3	\$20,000	\$80,000	\$20,000	\$57,600	\$20,000	\$55,000
4.4	Inter-district management and agreements, and governance structure.	4.4	\$2,000	\$20,000	\$2,000	\$14,400	\$2,000	\$12,000
4.5	Evaluate storage options (location, preliminary feasibility, regulatory and legal constraints).	4.5	\$40,000	\$1,800	\$40,000	\$1,296	\$45,000	\$1,200
4.6	Write Completion Memorandum #4	4.6	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
5.1	Develop scenarios to meet water supply and demand imbalances based on future near-term and long-term projections, district conservation and management plans, and opportunities identified in prior tasks (including two sets of scenarios - one with "new" storage, the other without).	5.1	\$70,000	\$140,000	\$70,000	\$100,800	\$50,000	\$50,000
5.2	Identify cost and funding options, for both near-term (lower cost) and long-term (higher cost) projects, associated with each scenario.	5.2						
5.3	Model outcomes of identified scenarios.	5.3						
5.4	Evaluate changes in supply and demand imbalance with each near-term and long-term scenario.	5.4						
5.5	Conduct trade-off analysis of options accounting for costs, environmental impact, risk, stakeholder response and other potential attributes. [Former 2.4: Peer review/evaluation of existing flow/temperature modeling associated with Tumalo Creek and the middle Deschutes River (helps to inform location of instream efforts).]	5.5						
5.6	Write Completion Memorandum #5	5.6						
6.1	Incorporate Completion Memoranda, Technical Memoranda and comments into a consolidated Draft Basin Study Report: upon review of the draft, Prepare and Publish Final Basin Study.	6.1	\$30,000	\$40,000	\$30,000	\$40,000	\$40,000	\$40,000
6.2	Technical Sufficiency Review	6.2	\$25,000	\$0	\$25,000	\$0	\$25,000	\$0
*Sub-total:			\$223,000	\$525,100	\$215,500	\$376,992	\$153,500	\$291,800

*Sub-Totals from original documents.

*Sub-basin sub-totals account only for task budget that is specific to the sub-basin, overarching task budgets are not included

Tasks and budget numbers in bold represent items tasks that run across all sub-basins

Supply and Demand = Instream and Out of Stream Supply and Demand unless otherwsie noted

Whychus Sub-Group 2/26/2015			Initial Budget		Sub-group budget used at Budget Meeting		Post-Budget Meeting/Subgroup Meeting	
			1/30/2015		2/23/2015		2/26/2015	
			Budget Estimate - Reclamation and IDIQ Contractor	Budget Estimate - Non-Federal Cost Share Partner	Budget Estimate - Reclamation and IDIQ Contractor	Budget Estimate - Non-Federal Cost Share Partner	Budget Estimate - Reclamation and IDIQ Contractor	Budget Estimate - Non-Federal Cost Share Partner
Task	Description							
1.1	Summarize existing information on current water supply	1.1	\$1,000	\$7,500	\$1,000	\$7,500	\$1,000	\$5,000
1.2	Develop climate change analysis projections.	1.2	\$60,000	\$1,800	\$60,000	\$2,300	\$60,000	\$1,800
1.3	Apply climate change analysis to current supplies.	1.3	\$65,000	\$1,800	\$65,000	\$2,300	\$65,000	\$1,800
1.4	Write Completion Memorandum #1.	1.4	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
2.1	Summarize existing information on current and future water demand (instream and out of stream).	2.1	\$1,000	\$7,500	\$1,000	\$7,500	\$1,000	\$5,000
2.2	Evaluate current and future groundwater/mitigation demand.	2.2	\$2,000	\$5,000	\$2,000	\$5,000	\$2,000	\$5,000
2.3	Evaluate water rights availability based on available gage data in an effort to determine what quantity of "paper" water rights will equate to "wet water" instream to meet baseline flow targets	2.3	\$1,000	\$2,500	\$1,000	\$2,500	\$1,000	\$500
2.4	Expansion of existing flow/temperature modeling to include additional life cycle periods for fish.	2.4	\$4,500	\$2,500	\$4,500	\$2,500	\$4,500	\$2,500
2.5	Evaluate stream water quality (budget assumes RiverWare evaluation of temperature issues).	2.5					\$40,000	\$1,200
2.6	Apply climate change analysis to projected future demands.	2.6	\$60,000	\$1,800	\$60,000	\$1,800	\$60,000	\$1,800
2.7	Write Completion Memorandum #2	2.7	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
3.1	Identify and evaluate current water and power infrastructure in the basin, and develop metrics of measuring baseline system reliability.	3.1	\$5,000	\$20,000	\$5,000	\$20,000	\$5,000	\$10,000
3.2	Characterize projected water and power infrastructure performance based on climate change projections	3.2	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$5,000
3.3	Write Completion Memorandum #3	3.3	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
4.1	Evaluate water conservation and re-allocation options and packages of options/projects. Identify viable options for meeting the water supply needs for irrigation, instream and municipal/water suppliers. Identify legal and administrative requirements for option implementation.	4.1						
4.1a	Document groundwatr capacity within TSID to support potential use of groundwater to augment streamflows in dry years (analysis of water quantity and quality impacts at springs and happens in tradeoff analysis). Document legal/policy constraints.	4.1a						
4.1b	Evaluate conservation opportunities (TSID canal efficiencies; on-farm efficiency; municipal conservation).	4.1b	\$5,000	\$50,000	\$5,000	\$50,000	\$5,000	\$27,000
4.1c	Evaluate the opportunity for water rights transfers.	4.1c						
4.1d	Evaluate policies/pricing of TSID leasing to optimize program.	4.1d						
4.1e	Evaluate all available tools for manaing water resources in drought (tools and policies).	4.1e						
4.1f	Evaluate aquifer recharge and non-structural storage.	4.1f						
4.1g	Evaluate off-channel storage options (evaluation of legal constraints to help guide level of analysis).	4.1g						
4.2	Write Completion Memorandum #4	4.2	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
5.1	Develop scenarios to meet water supply and demand imbalances based on future near-term and long-term projections, district conservation and management plans, and opportunities identified in prior tasks (Two sets of scenarios - one with "new" storage, the other without).	5.1						
5.2	Identify cost and funding options, for both near-term (lower cost) and long-term (higher cost) projects, associated with each scenario.	5.2						
5.3	Model outcomes of identified scenarios.	5.3	\$15,000	\$30,000	\$15,000	\$30,000	\$15,000	\$20,000
5.4	Evaluate changes in supply and demand imbalance with each near-term and long-term scenario.	5.4						
5.5	Conduct trade-off analysis of options accounting for costs, environmental impact, including groundwater impacts, water quantiy and quality at springs, stakeholder response and other potential attributes.	5.5						
5.6	Write Completion Memorandum #5	5.6						
6.1	Incorporate Completion Memoranda, Technical Memoranda and comments into a consolidated Draft Basin Study Report: upon review of the draft, Prepare and Publish Final Basin Study.	6.1	\$30,000	\$40,000	\$30,000	\$40,000	\$40,000	\$40,000
6.2	Technical Sufficiency Review	6.2	\$25,000	\$0	\$25,000	\$0	\$25,000	\$0
*Sub-total:			\$25,500	\$85,000	\$25,500	\$85,000	\$25,500	\$50,000

*Sub-Totals from original documents.

*Sub-basin sub-totals account only for task budget that is specific to the sub-basin, overarching task budgets are not included

Tasks and budget numbers in bold represent items tasks that run across all sub-basins

Supply and Demand = Instream and Out of Stream Supply and Demand unless otherwsie noted

Crooked Sub-Group 2/26/2015			Initial Budget		Sub-group Recommended Budget		Post-Budget Meeting	
			1/30/2015		2/23/2015		2/26/2015	
			Budget Estimate - Reclamation and IDIQ Contractor	Budget Estimate - Non-Federal Cost Share Partner	Budget Estimate - Reclamation and IDIQ Contractor	Budget Estimate - Non-Federal Cost Share Partner	Budget Estimate - Reclamation and IDIQ Contractor	Budget Estimate - Non-Federal Cost Share Partner
Task	Description	Task						
1.1	Summarize existing information on current water supply	1.1	\$1,000	\$7,500	\$1,000	\$7,500	\$1,000	\$5,000
1.2	Develop climate change analysis projections.	1.2	\$60,000	\$1,800	\$60,000	\$2,300	\$60,000	\$1,800
1.3	Apply climate change analysis to current supplies.	1.3	\$65,000	\$1,800	\$65,000	\$2,300	\$65,000	\$1,800
1.4	Write Completion Memorandum #1.	1.4	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
2.1	Summarize existing information on current and future water demand (instream and out of stream).	2.1	\$1,000	\$7,500	\$1,000	\$7,500	\$1,000	\$5,000
2.2	To help refine instream demand, identify and apply an approach to evaluate year-round flow-temperature relationships in the Crooked River from Bowman Dam (river mile 72.8) to Osborne Canyon (14.1) and in Ochoco Creek from Ochoco Reservoir (10.4) to the mouth (0.0). ₁	2.2	\$2,000	\$40,000	\$2,000	\$40,000	\$2,000	\$40,000
2.3	Evaluate current and future groundwater/mitigation demand.	2.3	\$2,000	\$5,000	\$2,000	\$5,000	\$2,000	\$5,000
2.4	Evaluate stream water quality (budget assumes RiverWare evaluation of temperature issues).	2.4					\$40,000	\$1,200
2.5	Apply climate change analysis to projected future demands.	2.5	\$60,000	\$1,800	\$60,000	\$1,800	\$60,000	\$1,800
2.6	Write Completion Memorandum #2	2.6	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
3.1	Identify and evaluate current water and power infrastructure in the basin, and develop metrics of measuring baseline system reliability.	3.1	\$5,000	\$20,000	\$5,000	\$20,000	\$5,000	\$10,000
3.2	Characterize projected water and power infrastructure performance based on climate change projections	3.2	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$5,000
3.3	Write Completion Memorandum #3	3.3	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
4.1	Identify viable options for meeting the water supply needs for irrigation, instream, and municipal/water suppliers. Identify legal and administrative requirements for option implementation.	4.1	\$29,500	\$39,000	\$50,000	\$27,000	\$50,000	\$30,000
4.1a	Document the following: the feasibility and cost/benefit of phased piping in OID, existing instream leasing program and potential improvements as a supply option in the Basin Study; cost-benefit of McKay Creek Switch, OID diversion switch, and North Unit Water Supply Program; City of Prineville wetlands project and associated water quality/quantity benefits.	4.1a						
4.1b	Evaluate non-structural storage opportunities.	4.1b						
4.1c	Reconnaissance evaluation of potential structural storage opportunities (identify legal constraints first to guide analysis).	4.1c						
4.1d	Evaluate upland management as water supply opportunties (e.g., juniper thinning).	4.1d						
4.1e	Evaluate structural modifications to better manage reservoir releases.	4.1e						
4.1f	Evaluate structural modifications to improve forecasting (SNOTEL sites, gages).	4.1f						
4.1g	Evaluate opportunities to increase on-farm efficiencies (focus on non-district lands).	4.1g						
4.1h	Develop a plan for water measurement at all points of diversion.	4.1h						
4.1i	Evaluate addition legal constraints not addressed under other options (e.g., modifying rule curves).	4.1i						
4.2	Write Completion Memorandum #4	4.2	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
5.1	Develop scenarios to meet water supply and demand imbalances based on future near-term and long-term projections, district conservation and management plans, and opportunities identified in prior tasks (Two sets of scenarios - one with "new" storage, the other without).	5.1	\$15,000	\$30,000	\$15,000	\$20,000	\$10,000	\$10,000
5.2	Identify cost and funding options, for both near-term (lower cost) and long-term (higher cost) projects, associated with each scenario.	5.2						
5.3	Model outcomes of identified scenarios.	5.3						
5.4	Evaluate changes in supply and demand imbalance with each near-term and long-term scenario.	5.4						
5.5	Conduct trade-off analysis of options accounting for costs, environmental impact, risk, stakeholder response and other potential attributes.	5.5						
5.6	Write Completion Memorandum #5	5.6						
6.1	Incorporate Completion Memoranda, Technical Memoranda and comments into a consolidated Draft Basin Study Report: upon review of the draft, Prepare and Publish Final Basin Study.	6.1	\$30,000	\$40,000	\$30,000	\$40,000	\$40,000	\$40,000
6.2	Technical Sufficiency Review	6.2	\$25,000	\$0	\$25,000	\$0	\$25,000	\$0
Sub-total:			\$56,500	\$111,000	\$67,000	\$87,000	\$62,000	\$80,000

*Sub-Totals from original documents.

*Sub-basin sub-totals account only for task budget that is specific to the sub-basin, overarching task budgets are not included

Tasks and budget numbers in bold represent items tasks that run across all sub-basins

Supply and Demand = Instream and Out of Stream Supply and Demand unless otherwise noted

The subgroup recommended holding onto the additional \$24K pending more discussion on tasks, for a total of \$111,000

Over-arching Tasks 2/26/2015			Initial Budget		Sub-group Recommended Budget		Post-Budget Meeting	
			1/30/2015		2/23/2015		2/26/2015	
			Budget Estimate - Reclamation and IDIQ Contractor	Budget Estimate - Non-Federal Cost Share Partner	Budget Estimate - Reclamation and IDIQ Contractor	Budget Estimate - Non-Federal Cost Share Partner	Budget Estimate - Reclamation and IDIQ Contractor	Budget Estimate - Non-Federal Cost Share Partner
Task Group	Description	Task Group						
7	Project Management (day-to-day coordination, communication, status reporting, cost tracking, etc.)	7	\$30,000	\$40,000	\$90,000	\$80,000	\$80,000	\$80,000
	Project manager - Study team meetings/travel expenses		\$40,000	\$40,000	\$30,000	\$24,000	\$30,000	\$24,000
	Accounting		\$5,000	\$5,000	\$3,000	\$3,600	\$3,000	\$3,600
	Contract management (USBR)		\$5,000	\$5,000	\$10,000	\$0	\$7,000	\$0
	Reporting (website, tech memo editing, etc.)				\$10,000	\$10,000	\$10,000	\$2,500
	Facilitation (quarterly BSWG meetings, study team facilitation as needed)				\$0	\$11,500	\$0	\$11,500
	Plan of Study development		\$0	\$70,000	\$0	\$70,000	\$0	\$70,000
1	Summarize existing information on current water supply	1	\$1,000	\$7,500	\$1,000	\$7,500	\$1,000	\$5,000
	Develop climate change analysis projections.		\$60,000	\$1,800	\$60,000	\$2,300	\$60,000	\$1,800
	Apply climate change analysis to current supplies.		\$65,000	\$1,800	\$65,000	\$2,300	\$65,000	\$1,800
	Write Completion Memorandum #1.		\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
2	Summarize existing information on current and future water demand.	2	\$1,000	\$7,500	\$1,000	\$7,500	\$1,000	\$5,000
	Evaluate current and future groundwater/mitigation demand.		\$2,000	\$5,000	\$2,000	\$5,000	\$2,000	\$5,000
	Evaluate stream water quality (budget assumes RiverWare evaluation of temperature issues).						\$40,000	\$1,200
	Apply climate change analysis to projected future demands.		\$60,000	\$1,800	\$60,000	\$1,800	\$60,000	\$1,800
	Write Completion Memorandum #2		\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
3	Identify and evaluate current water and power infrastructure in the basin, and develop metrics of measuring baseline system reliability.	3	\$5,000	\$20,000	\$5,000	\$20,000	\$5,000	\$10,000
	Characterize projected water and power infrastructure performance based on climate change projections		\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$5,000
	Write Completion Memorandum #3		\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
4	Write Completion Memorandum #4	4	\$3,000	\$5,500	\$0	\$5,500	\$0	\$2,500
5	No Over-arching tasks associated with Completion Memorandum #5	5						
6	Develop draft Basin Study Report, incorporating information from Completion Memoranda, Technical Memoranda, Technical sufficiency review, and other study tasks; upon review of the draft, incorporate comments and prepare/publish Final Basin Study Report.	6	\$30,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
	Technical Sufficiency Review		\$25,000	\$0	\$25,000	\$0	\$25,000	\$0
7	Communication and Outreach Plan (COP)	7	\$0	\$0	\$5,000	\$2,500	\$5,000	\$5,000
7	Scope Reserve	7	\$25,000	\$25,000	\$75,000	\$75,000	\$50,000	\$45,000
*Sub-total:			\$441,000	\$327,400	\$507,000	\$410,000	\$509,000	\$328,200

**Sub-Totals from original documents.*

Supply and Demand = Instream and Out of Stream Supply and Demand unless otherwsie noted